



32608-A-sequence list with table 3.ST25.txt  
SEQUENCE LISTING

<110> Novartis AG  
Krause, Andreas  
Niese, Detlef  
Raulf, Friedrich  
Scherer, Andreas

<120> Diagnosis of chronic rejection

<130> 4-32608A

<140> PCT/EP03/09292

<141> 2003-08-21

<150> US 60/405,225

<151> 2002-08-22

<160> 38

<170> PatentIn version 3.3

<210> 1

<211> 63

<212> DNA

<213> Artificial

<220>

<223> Primer sequence

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ttt

63

<210> 2

<211> 20

<212> DNA

<213> Artificial

<220>

<223> Primer sequence

<400> 2  
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20

<210> 3

<211> 19

<212> DNA

<213> Artificial

<220>

<223> Primer sequence

<400> 3

32608-A-sequence list with table 3.ST25.txt

gctgcacatctc cttgctcca

19

<210> 4  
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<212> DNA  
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<220>  
<223> Primer sequence

<400> 4  
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23

<210> 5  
<211> 19  
<212> DNA  
<213> Artificial

<220>  
<223> Primer sequence

<400> 5  
ggagccccaa aacctacca

19

<210> 6  
<211> 19  
<212> DNA  
<213> Artificial

<220>  
<223> Primer sequence

<400> 6  
aagcaagaag cagcagccaa

19

<210> 7  
<211> 19  
<212> DNA  
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<220>  
<223> Primer sequence

<400> 7  
tcgcgtgttc cccaaaggcg

19

<210> 8  
<211> 21

32608-A-sequence list with table 3.ST25.txt

<212> DNA  
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<220>  
<223> Primer sequence

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<210> 9  
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<220>  
<223> Primer sequence

<400> 9  
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18

<210> 10  
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<220>  
<223> Primer sequence

<400> 10  
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30

<210> 11  
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<220>  
<223> Primer sequence

<400> 11  
gcaaggaggg caggacact

19

<210> 12  
<211> 22  
<212> DNA  
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<220>  
<223> Primer sequence

<400> 12

32608-A-sequence list with table 3.ST25.txt  
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22

<210> 13  
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<220>  
<223> Primer sequence  
  
<400> 13  
caggcactga gcaaggcaggc cc

22

<210> 14  
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<212> DNA  
<213> Artificial  
  
<220>  
<223> Primer sequence  
  
<400> 14  
tggccttctc agtttgggc

19

<210> 15  
<211> 21  
<212> DNA  
<213> Artificial  
  
<220>  
<223> Primer sequence  
  
<400> 15  
ttcagttatt ccgaacggga a

21

<210> 16  
<211> 24  
<212> DNA  
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<223> Primer sequence  
  
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aaagggatgg aggcttacg gcca

24

<210> 17  
<211> 21

32608-A-sequence list with table 3.ST25.txt

<212> DNA  
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<220>  
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21

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<220>  
<223> Primer sequence

<400> 18  
tttgaatccc aggcaacttt g

21

<210> 19  
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<212> DNA  
<213> Artificial

<220>  
<223> Primer sequence

<400> 19  
tctcctggga cgagaaggac tcatacca

27

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<220>  
<223> Primer sequence

<400> 20  
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26

<210> 21  
<211> 22  
<212> DNA  
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<220>  
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<400> 21

32608-A-sequence list with table 3.ST25.txt  
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22

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<220>  
<223> Primer sequence  
  
<400> 22  
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33

<210> 23  
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<212> DNA  
<213> Artificial  
  
<220>  
<223> Primer sequence  
  
<400> 23  
tggaaattct gtcacttct tgc

23

<210> 24  
<211> 22  
<212> DNA  
<213> Artificial  
  
<220>  
<223> Primer sequence  
  
<400> 24  
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22

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<211> 22  
<212> DNA  
<213> Artificial  
  
<220>  
<223> Primer sequence  
  
<400> 25  
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22

<210> 26  
<211> 24

32608-A-sequence list with table 3.ST25.txt

<212> DNA  
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<220>  
<223> Primer sequence

<400> 26  
gacactacta aagctccag ctcc

24

<210> 27  
<211> 20  
<212> DNA  
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<220>  
<223> Primer sequence

<400> 27  
ttcttggaaatc agctgcttggaa

20

<210> 28  
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<220>  
<223> Primer sequence

<400> 28  
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31

<210> 29  
<211> 1709  
<212> DNA  
<213> homo sapiens

<400> 29  
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catgaccacc acatttctgc aaaccttcttc ctccacccttt ggggggtggct caacccgagg

120

gggtttccctt ctggctgggg gaggtggctt tgggtgggggg agtctctctg ggggaggggtgg

180

aagccgaagt atctcagctt cttctgctag gtttgtctct tcagggtcag gaggaggata

240

tgggggtggc atgagggtct gtggctttgg tggagggctt ggttagtgttt tcgggtggagg

32608-A-sequence list with table 3.ST25.txt

300

cttggaggg ggcgttggtg ggggtttgg tggcgtttt ggtggggcg atgggggtct

360

cctctctggc aatgagaaaa ttaccatgca gaacctcaat gaccgcctgg ctcctaccc

420

ggacaaggta cgtgcctgg aggaggccaa tgctgacctg gaggtgaaga tccatgactg

480

gtaccagaag cagaccccaag ccagcccaga atgcgactac agccaatact tcaagaccat

540

tgaagagctc cgggacaaga tcatggccac caccatcgac aactcccgaa tcattcctgga

600

gatcgacaat gccaggctgg ctgcggacga cttcaggctc aagtatgaga atgagctggc

660

cctgcgccag ggcgttggagg ctgacatcaa cggcttgcgc cgagtcctgg atgagctgac

720

cctggccagg actgacctgg agatgcagat cgagggcctg aatgaggagc tagcctaccc

780

gaagaagaac cacgaagagg agatgaagga gttcagcagc cagctggccg gccaggtcaa

840

tgtggagatg gacgcagcac cgggtgtgga cctgaccctg gtgctggcag agatgaggga

900

gcagtacgag gccatggccg agaagaaccg ccgggatgtc gaggcctgg tcttcagcaa

960

gactgaggag ctgaacaaag aggtggcctc caacacagaa atgatccaga ccagcaagac

1020

ggagatcaca gacctgagac gcacgatgca ggagctggag atcgagctgc agtcccagct

1080

cagcatgaaa gctgggctgg agaactcaact ggccgagaca gagtgccgct atgccacgca

1140

gctgcagcag atccaggggc tcattggtg cctggaggcc cagctgagtg agctccgatg

1200

32608-A-sequence list with table 3.ST25.txt  
cgagatggag gctcagaacc aggagtacaa gatgctgctt gacataaaga cacggctgga

1260

gcaggagatc gctacttacc gcagcctgct cgagggccag gatgccaaga tggctggcat

1320

tggcatcagg gaagcctctt caggaggtgg tggtagcagc agcaatttcc acatcaatgt

1380

agaagagtca gtggatggac aggtggtttc ttcccacaag agagaaatct aagtgtctat

1440

tgcaggagaa acgtcccttg ccactccccca ctctcatcag gccaaagtggaa ggactggcca

1500

gagggcctgc acatgcaaac tccagtcct gccttcagag agctgaaaag ggtccctcg

1560

tcttttattt cagggctttg catgcgtct attccccctc tgccctctccc caccttcttt

1620

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1680

aataaagaat tactttcct tttgcaa

1709

<210> 30

<211> 1359

<212> DNA

<213> homo sapiens

<400> 30

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60

cactaaaacg tccctgccta caaatcatcc ggccaaatta tgagttcatt gtattatgcg

120

aatgctttat tttctaaata tccagcctca agttcggttt tcgctaccgg agccttccca

180

gaacaaacctt cttgtgcgtt tgcttccaac ccccagcgcc cgggctatgg agcgggttcg

240

ggcgcttcct tcgcccggctc gatgcagggc ttgtaccccg gcgggggggg catggcgggc

300



32608-A-sequence list with table 3.ST25.txt

cgccttgctg ctgctgctt cttccgtcc cccagccccca tgctcccttt acattctgtg

1320

tgtatctaaa ggatggaaaa ataaaaacgca attaaaaaat

1359

<210> 31

<211> 1370

<212> DNA

<213> homo sapiens

<400> 31

gacgcctctg cgcgaggaac gaggagctac gggcctggc ccggttattt ccatggcag

60

cggtgccgc atcgaatgca tatttttag cgagttccac cccacgctgg gacccaagat

120

cacctatcg gtccctgaag acttcatctc ccgagagctg tttgacacag tccaagtgt

180

catcatcacc aagccagagc tgcagaacaa gcttatcaact gtctagagag cagttcgtg

240

tccatggagg agagcaagca gaagttggtg cccatcatga ccatttgct ggaggagcta

300

aatgcctcag gccgggtcac tctgcccatt gatgagtcca acaccatcca cttgaaggt

360

attgagcagc ggccagaccc tccgggtggcc caggagtatg atgtacctgt ctttaccaa

420

gacaaggagg atttcttcaa ctcacagtgg gacctcacta cacaacaaat cctgcccata

480

attgatgggt tccgccacat ccagaagatt tcagcagagg cagatgtgga gctcaacctg

540

gtgcgcattt ctatccagaa cctgctgtac tacggcgttg tgacactggt gtccatcc

600

cagtactcca atgtatactg cccaaacgccc aaggtccagg acctggtaga tgacaagtcc

660

ctgcaagagg catgtctatc ctacgtgacc aagcaagggc acaagagggc cagtctccgg

720

32608-A-sequence list with table 3.ST25.txt

gatgtttcc agctatactg cagcctgagc cctggcacta ccgtgcgaga cctcattggc

780

cgccacccccc agcagctgca gcatgttgat gaacggtcag aggagaattt gctggggcat

840

ttgggaggta cctgagggaa gctagaccct ttatgtctct caggagccct ggatcatggg

900

gcactgccaa tccaagcagg cttcctggag atgatggct acagagacaa aattgaaggg

960

agactacagg aaagggttgg cctgcctgaa agaaggcctg gccagggcgt caccggcgtcc

1020

tctgatcctc accctaggaa gctgatccag ttcgggctta tgaagaacct catcaggcga

1080

ctacagaagt atcctgtcg ggtgactcgg gaagagcaga gccaccctgc ccggctttat

1140

acaggctgcc acagctatga cgagatctgc tgcaagacag gcatgagcta ccatgagctg

1200

gatgagcggc ttgaaaatga ccccaacatc atcatctgct ggaagtgagg ctggtagtga

1260

ctggatggac acattgctgt ggtagtccc tcctactagg aggttgtca tactgtctag

1320

aggttgactc ttagttctgt aaataaagac atccatttca aacaaaaaaaa

1370

<210> 32

<211> 2736

<212> DNA

<213> homo sapiens

<400> 32

ttgcactctc ccacaccctt ttctttcgt ccgtcttcg cttatttctc ccggcgctc

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ctctgcataa gaaggggaac gaaagatggc ggcggaaacg ctgctgtcca gtttgttagg

120

actgctgctt ctgggactcc tggtaaccgc aagtctgacc ggccgtgtcg ggagcctgaa

180

32608-A-sequence list with table 3.ST25.txt

cctggaggag ctgagtgaga tgcgttatgg gatcgagatc ctgccgttgc ctgtcatgg  
240  
agggcagagc caatcttcgg acgtggtgat tgtctccctct aagtacaaac agcgctatga  
300  
gtgtcgcctg ccagctggag ctattcaattt ccagcgtgaa agggaggagg aaacacctgc  
360  
ttaccaaggg cctgggatcc ctgagttgtt gagcccaatg agagatgctc cctgcttgct  
420  
gaagacaaag gactggtggaa catatgaattt ctgttatggaa cgccacatcc agcaatacca  
480  
catggaagat tcagagatca aaggtaagt cctctatctc ggctactacc aatcagcctt  
540  
cgactggat gatgaaacag ccaaggcctc caagcagcat cgtcttaaac gctaccacag  
600  
ccagacctat ggcaatgggt ccaagtgcga ccttaatggg aggccccggg aggccgaggt  
660  
tcggttcctc tgtgacgagg gtgcaggtat ctctgggac tacatcgatc gcgtggacga  
720  
gcccttgtcc tgctcttatg tgctgaccat tcgcactcct cggctctgcc cccaccctct  
780  
cctccggccc ccacccagtg ctgcaccaca ggccatcctc tgtcaccctt ccctacagcc  
840  
tgaggagtac atggcctacg ttcagaggca agccgactca aagcagtatg gagataaaat  
900  
catagaggag ctgcaagatc taggccccca agtgtggagt gagaccaagt ctggggtggc  
960  
accccaaaag atggcaggtg cgagcccgac caaggatgac agtaaggact cagatttctg  
1020  
gaagatgctt aatgagccag aggaccaggc cccaggaggg gaggaggtgc cggctgagga  
1080  
gcaggaccca agccctgagg cagcagattc agttctggc gctcccaatg attttcagaa

32608-A-sequence list with table 3.ST25.txt

1140

caacgtgcag gtcaaagtca ttcgaagccc tgccgattt attcgattca tagaggagct

1200

gaaagggtgga acaaaaaagg ggaagccaaa tataggccaa gagcagcctg tggatgtgc

1260

tgcagaagtc cctcagaggg aaccagagaa ggaaagggtt gatccagaac ggcagagaga

1320

gatggaagaa gaggaggatg aggtgagga tgaggatgaa gatgaggatg aacggcagtt

1380

actgggagaa tttgagaagg aactggaagg gatcctgctt ccgtcagacc gagaccggct

1440

ccgttcggag gtgaaggctg gcatggagcg ggaactggag aacatcatcc aggagacaga

1500

gaaagagctg gacccagatg ggctgaagaa ggagtcagag cgggatcggg caatgctggc

1560

tctcacatcc actctaaca aactcatcaa aagactggag gaaaaacaga gtccagagct

1620

ggtgaagaag cacaagaaaa agagggtgtt ccccaaaaag cctccccat caccccaacc

1680

tacagaggag gatcctgagc acagagtccg ggtccgggtc accaagctcc gtctcgagg

1740

ccctaatacg gatctgactg tcctcgagat gaaacggaa aacccacagc taaaacaaat

1800

cgaggggctg gtgaaggagc tgctggagag ggagggactc acagctgcag ggaaaattga

1860

gatcaaattt gtccgccccat gggctgaagg gactgaagag ggtgcacgtt ggctgactga

1920

tgaggacacg agaaacctca aggagatctt cttcaatatc ttggtgccgg gagctgaaga

1980

ggcccagaag gaacgccagc ggcagaaaga gctggagagc aattaccgcc gggtgtgggg

2040

ctctccaggt ggggagggca cagggacct ggacgaattt gacttctgag accaacacta

32608-A-sequence list with table 3.ST25.txt

2100

cacttgaccc ttcacggaat ccagactctt cctggactgg cttgcctcct ccccacctcc

2160

ccaccctgga acccctgagg gccaaacagc agagtggagc tgagctgtgg acctctcgaa

2220

caactctgtg ggtgtgggg ccctgggtga atgctgctgc ccctgctggc agccaccc

2280

agacccctcacc gggcctgtga tatttgctct cctgaactct cactcaatcc tcttcctctc

2340

ctctgtggct tttcctgtta ttgtccccata atgataggat attccctgct gcctaccc

2400

agattcagta ggatcttttg agtggaggtg ggttagagaga gcaaggaggg caggacactt

2460

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2520

ctcttctatt gaattgcctt gggatttcct tctcccttcc cctgcccacc ctgtccccata

2580

caatttgtgc ttctgagttg aggagccttc acctctgttg ctgaggaaat ggtagaatgc

2640

tgcctatcac ctccagcaca atcccagcga aaaaggtgtg aagcacccac catgttcttg

2700

aacaatcagg tttctaaata aacaactgga ccatca

2736

<210> 33

<211> 859

<212> DNA

<213> homo sapiens

<400> 33

gggtacagc aagctgtgat tcttggaaa actaaaaaaag ttttctggga caacggggcc

60

ccagagtgat ggcagacaat gtcagccact aacaacatag cccaggccccg gaagctggtg

120

gaacagctac gcatagaagc cgggatttag cgcataagg tctccaaagc ggcgtctgac

32608-A-sequence list with table 3.ST25.txt

180

ctcatgagct actgtgagca acatgctcg aacgaccccc tgctggtcgg agtccctgcc

240

tcggagaacc ccttaagga caagaaacct tgtattattt tataactgtg ttctcatatg

300

ttctctctct ctctttct ttctctctct ctctctgtct ctgtctgtgt ctcaggcagg

360

gcatcattca gtaattagct caaacaaaac atctcaagtc cccaaaacct ttaattccaa

420

aagaaatccc ccctctaccc cgccaaaaaa ggcgttcca ccgcccggat gggtagaat

480

ggaccttcta ggtggagatg aattttcagg tccgaccaca tggccttctc agtttggcc

540

aaaaggatg gaggctttac ggccacttcc cgttcggaat aactgaaatc cccagcgatg

600

gggtaacaat ttttaaaac tctcgattgc cgtttcaatt gtggaccggc gccgaggggg

660

aaagggaggt gacttcgccc ggtggcaata gttccggag aattggccat tggtaaaaag

720

acttcatagg gtcactggaa tgcttggtgt tgtttttaag tagaggtaaa attgagatgg

780

ggggcgggag gtgacatcat gaagttttt ggaaatatct ctttatttaa aaaattgtta

840

ctccatacgg ctaaaaaaag

859

<210> 34

<211> 1838

<212> DNA

<213> homo sapiens

<400> 34

ggcgggggtgg gcagggttct accacgtgta ggataatcat tcattgggtgt gtccaaaaat

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32608-A-sequence list with table 3.ST25.txt

120

cccaacaaca tcctctgcca tacacaacaa aacgtaagtt tcatttggc aaaaatttag

180

cctcacaata aacaccctga agacacaact tgacttataa catagtgcac agcaagagct

240

acatccaagt gtcctattat ctgtgattat tttcttaatg acaatgtaca tatgccccca

300

tccatgttaa ttattatcta attccattag ggttcacgtc ttttcttct gggacactat

360

cctactatat ccatatctat agattcaat atagatgatt gtccatctt ctgtagcccc

420

tccgctctac tcattccttc caccatctgc agagattga agtttgggc tatgcataaa

480

acccaacact aaattttgca agtcaagtga ccaaaaaagg gggaggcatt ttgaagatag

540

aacctctatt taaaaagag aagttcaact cataaacgtg attgataggt ggctgattta

600

tttaggtttt gtcaagctat ctatcaaagt aatggtacag ttacccatct actcaaataat

660

ctgatttatac tcaccatcca attatctacc cacctgtctt cctctctagc aatctattta

720

ctgttatca atctatcaat gtaattgtct aacactcctt tctattctct ccctactact

780

cactatcaat tcattccat atgaatctct aaccatattg tatctctccc actgtattca

840

tttatacacc atcagcagac attggcatct tcaaaattat cttcaactt ctgtgaaagc

900

caacgatctc acaggttaac aaaataaaaa agcaataccc tgtgttgtgg actctttaaa

960

atctggtatac ctatccaccc aaggagaca ctaacagata ggccaaagta gcaagctaat

1020

32608-A-sequence list with table 3.ST25.txt  
gatcagtac tcactattcc cggaagagcc tgtgtttct aaaacactt cttgggaagc  
1080  
agatcagcct agaaaagttt tgattagcac tgtggtttc ctttgact tgaaggacaa  
1140  
aggtgccagc ctttatgctt ctctcaaccc ttcaagaaag tacatgtcag gaacctatgg  
1200  
ctggcttcc ttagcagcaa gaacttgaga gaaaaacaca tctgtctcg caatgcaaag  
1260  
tgaagagtcc acccgccctga gtgggatgac ttcagctaga gtctccttc tgctccagtt  
1320  
ctggtttaat ctgttgaaa actatccagt aaaaagctga tggaggccaa ttacatggcg  
1380  
ggtgtattga caactctggt atttgttca ggaagctttt ctaagctgag ggcacttgag  
1440  
caactgactt aattttcaag cacttgatta acacaacact gcaaacagaa gggagaaagt  
1500  
gtcagtgaca cagttccctc tcatgcagct gcttctccaa tggcttggg gaagaacttc  
1560  
accagctttt caggttcaaa gcagacccag catacaaaca agagctgagc caccttgct  
1620  
gtcttgctc ctgggacgag aaggactcat ccagcaaagt tgccctggat tcaaaataaa  
1680  
ggcattgcag accgcacagg tgtgctgcag ggactgatcc acagagagga tgagaatgca  
1740  
gcatcaatcg cagacctgcc ctgcctcagt tggaaaacct tttcaggccc tcagtctaaa  
1800  
aaataaaaaa tatgagcacc aaaaaaaaaa aaaaaaaaa  
1838

<210> 35  
<211> 1053  
<212> DNA  
<213> homo sapiens  
<400> 35

32608-A-sequence list with table 3.ST25.txt  
gaaaaagctc cctggaaaaa ctctgttgc acatgcacgt gccctgttac tcctccagcc  
60  
agccagtgct gccagcattt tatttgtaa aagtccaaat aaataagggc ctgcatgcaa  
120  
cctttatctt caaaaactag gtttatatg taaaatgtga cttggaaat gattctgttt  
180  
attaactggc tgggattttt catttctatg aaagttcaa acatctccag tactttataa  
240  
aatcccaaca attgctgtaa gtcagcactt tggtccactc agcccaccca gcccacttgc  
300  
aactctgact cttcactgaa tcatatttg gaagtttggg tagggtgagg ctatcttctt  
360  
caagattatt ttctcatatg tctgtctgtc accttgtaaa ccatgagact cctgggtatt  
420  
tgcatgtaac ttctttgagg aagttaccac catctctgat atagacacac ttttgagtt  
480  
gcagtttctg ttagaatttt ttggagacta acttgccaat tctgtgaatg ttattgaata  
540  
tttaaaaagc tgggtctgtt atgggaggca ttttatttg tttgtgatt ggttaacatg  
600  
cccccttaga tttcctgatt taaaattata caaaattact attttgata aaataaagga  
660  
acacctacag aaaattaagt ttctaagatg tttctatact tcattagaaa agattttatt  
720  
actattactt atggttattt gtgattaaca cttaatgcgt ctccctgtat tttgtgttcc  
780  
atgaggtgct tggAACATT ggagtgcTCT gtgcgaggga catacagtga tatAGGAAAT  
840  
ttaaaaatta aaataatacc caaaACCCAC tttatcagat atggttattgt gatggtaat  
900  
attatgtgtc aacttggta ggctatggcg cccatgttac tggtaaaca ctagcctaga  
960

32608-A-sequence list with table 3.ST25.txt

tgttgctgtg aatatatttt gtagatgtga ttaacattta caatcagttg attttaagta

1020

aaggcggatcc tcatccaaaa aaaaaaaaaaaa aaa

1053

<210> 36  
<211> 754  
<212> DNA  
<213> homo sapiens

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<223> n is a, c, g, or t

<220>  
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<222> (14)..(15)  
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<223> n is a, c, g, or t

<220>  
<221> misc\_feature

32608-A-sequence list with table 3.ST25.txt

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<220> (220)..(220)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (251)..(251)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (259)..(259)
<223> n is a, c, g, or t

<220>
<221> misc_feature
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<221> misc_feature
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<223> n is a, c, g, or t

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<221> misc_feature
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<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (293)..(294)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (303)..(303)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (311)..(311)
<223> n is a, c, g, or t

<220>
<221> misc_feature
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<221> misc_feature
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<223> n is a, c, g, or t

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<221> misc_feature
<222> (336)..(338)
<223> n is a, c, g, or t

<220>
<221> misc_feature
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<223> n is a, c, g, or t
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32608-A-sequence list with table 3.ST25.txt

<220>  
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<223> n is a, c, g, or t

<220>  
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<223> n is a, c, g, or t

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<221> misc\_feature  
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<220>  
<221> misc\_feature  
<222> (365)..(368)  
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<220>  
<221> misc\_feature  
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<220>  
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<222> (385)..(752)  
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60  
ctggcttcat tccctgaact ggctttagna acnctggcag tctagcttat aaccccccagg  
120  
ctgactagag aactcaaggt aaaagcagcc caagaaaaac agaccaacag aaaagcaatg  
180  
agagaaaagga tgaaggttcc ctnctcgatg atccattaaan tggaagagta acccaagaaa  
240  
acatcatgga ntccaagant cagtggatcc agcacaanaa ggnggnaaag ggnnattcag

32608-A-sequence list with table 3.ST25.txt

300

ctnggtctta ncaggtgact gtcaaannnn ggnntnnncc cagnntgnnc tgntcaannn

360

nnntnnnnca gnntnnnnntn gncannnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn

420

nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn

480

nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn

540

nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn

600

nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn

660

nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn

720

nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nngg

754

<210> 37

<211> 2064

<212> DNA

<213> homo sapiens

<400> 37

aaaatgggt ttggtgtaaa tctgggggtg taatgttatac atatatact ctacctcgta

60

aaaccgacac tgaaagctgc cggacaacaa atcacaggtc aaaattatga gttcttcgta

120

ttatgtgaac gcgttttta gcaaataac ggccggact tctctgttcc aaaatgccg

180

ggcgacttct tgctccttg cgcccaactc acagagaagc ggctacgggg cgggcgccgg

240

cgccttcgcc tcgaccgttc cgggctata caatgtcaac agccccctt atcagagccc

300

cttgcgtcc ggctacggcc tggcgccga cgcctacggc aacctgcct ggcctccta

32608-A-sequence list with table 3.ST25.txt

360

cgacccaaac atccccgggc tctgcagtga cctcgccaaa ggcgcctgcg acaagacgga

420

cgagggcgcg ctgcatggcg cggctgaggc caatttccgc atctaccctt ggatgcggtc

480

ttcaggacct gacaggaagc ggggccgcca gacctacacg cgctaccaga cgctggagct

540

ggagaaggag ttccacttca accgctacctt gacccggcgc cgccgcattt aaatcgccc

600

cgcgcctgc ctcaccgagc gccagattaa gatctggttc cagaaccgcc gcatgaagt

660

gaagaaagag cataaggacg aaggtccgac tgccgccca gctcccgagg gcgcgtgcc

720

ctctgccgcc gccactgctg ccgcggacaa ggccgacgag gaggacgatg atgaagaaga

780

ggaagacgag gaggaatgag gggccgatcc gggccctct ctgcaccgga cagtcggaaa

840

agcgctttta agagactcac tggtttact tacaaaaatg gaaaaaaaaaaa aaaaaaaaaa

900

aggaagggct ggtcatggtg gaggtgcgcg aggagaaaca gttccagaaa gtgatcacag

960

aataacctgaa tgcccaagag tcagcctggc gctcttggtt gacctccaac attttatct

1020

aagtggccgg gacaaaattt accaaaacta gggggaggag gggaccagta gtactaatga

1080

cttactacag gtcatttatga aataagctaa caatactgaa tctttggcga gaaaattttt

1140

ctgctaaggc cactgcactg taatttgtta gtaaaggcta atatagttaga gattaagct

1200

ccgttgagga caggtgcctt gtcttaaca cgttgtattt atcacattt acataggat

1260

32608-A-sequence list with table 3.ST25.txt

aattgctgag ggatgacttg attgtactac ggtgagatga agggtaaga tttctcccc

1320

atcaccagta gcctccctag ctgggtccc tgtctccata ctctcctgaa tccacccccc

1380

actattgtcc gctggccctt tccagcctgt aaactggaca gtttcattc ctctgcctaa

1440

catccagtcg tagcagccca tcccatctct ttaaggataa aacccaaatt cttggtag

1500

taaagctaaa ccaagcgctc tccctggaag ggctcctgtg tttcaccaaa gctgacttac

1560

gtactttccc catcttccca ggcatcttgt acgtcggtac atttatcata ttggaaggta

1620

ataaatgatc ttgtttcct ctttcctgg gctccttatt aagagcaggg aacctaattt

1680

atatcctcag ggcagaacag gtattcagaa aagaataatg caagaggaaa aaagtttaat

1740

ataaaactagg gagatcgtaa cattggctaa tcacgagcaa atatttatacg aagaccact

1800

gtgtgctaaa tggctcctaa tatatactta agatattctc ccagcttggaa aattctgctc

1860

acttcttgct cttgcttgct tctctgggtgg gcttccatcc aaatttggcc atgacatcg

1920

atcatatggtaatattaac aaatattgtta taaattgttt tcatacttaa tatccaacag

1980

gttgtcaatt tacgtactac tggtgcctta tctgtttta ctgtccata cactgccat

2040

ctggaataag cttagtgtta aaaa

2064

<210> 38

<211> 2723

<212> DNA

<213> homo sapiens

<400> 38

32608-A-sequence list with table 3.ST25.txt  
ggaggctgaa atccccagac gccgggtttc tgggctggc tttctgctta ctcactccctt  
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ctccctcttt ctggattttt ccgaccgttc gcgaaacagc tttccacaca atggagcttc  
120  
atgtcctcggt gcaggaagta ctcatcgact gatgtggcag actttgctcc ctgacaaaac  
180  
taaagaactc tcctattcat ggaggcgaac actgaggatg ctttccacat gaaccctgaa  
240  
gtgaacttct gatacatttc ctgcagcaag agaaggcagc caacatgaag gaaaatgtgg  
300  
catctgcaac cgtttcaact ctgctacttt ttctcaacac ctgccttctg aatggacagt  
360  
tacccctgg aaaacctgag atcttaaat gtcgttctcc caataaggaa acattcacct  
420  
gctggtggag gcctgggaca gatggaggac ttcctaccaa ttattcactg acttaccaca  
480  
gggaaggaga gacactcatg catgaatgtc cagactacat aaccgggtggc cccaaactcct  
540  
gccactttgg caagcagtac acctccatgt ggaggacata catcatgtg gtcaatgcca  
600  
ctaaccagat gggaaagcagt ttctcgatg aactttatgt ggacgtgact tacatagttc  
660  
agccagaccc tcctttggag ctggctgtgg aagtaaaaca gccagaagac agaaaaccct  
720  
acctgtggat taaatggtct ccacctaccc tgattgactt aaaaactggg tggttcacgc  
780  
tcctgtatga aattcgatta aaacccgaga aagcagctga gtgggagatc catttgctg  
840  
ggcagcaaac agagtttaag attctcagcc tacatccagg acagaatac cttgtccagg  
900  
ttcgctgcaa accagaccat ggatactgga gtgcgtggag tccagcgacc ttcattcaga  
960

32608-A-sequence list with table 3.ST25.txt

tacctagtga cttcaccatg aatgatacaa ccgtgtggat ctctgtggct gtccttctg  
1020  
ctgtcatctg tttgattatt gtctggcag tggcttgaa gggctatagc atggtgacct  
1080  
gcatcttcc gccagttcct gggccaaaaaaa taaaaggatt tgatgctcat ctgttgaga  
1140  
agggcaagtc tgaagaacta ctgagtgcct tggatgcc aagcttcct cccacttctg  
1200  
actatgagga cttgctggtg gagtat tagatgatga tagtgaggac cagcatctaa  
1260  
tgtcagtcca ttcaaaagaa caccaagtc aaggtatgaa acccacatac ctggatcctg  
1320  
acactgactc aggccgggg agctgtgaca gcccttcct tttgtctgaa aagtgtgagg  
1380  
aaccccaggc caatccctcc acattctatg atcctgaggt cattgagaag ccagagaatc  
1440  
ctgaaacaac ccacacctgg gacccccagt gcataagcat ggaaggcaaa atcccattt  
1500  
ttcatgctgg tggatccaaa tttcaacat ggcccttacc acagcccagc cagcacaacc  
1560  
ccagatcctc ttaccacaat attactgatg tgtgtgagct ggctgtggc cctgcaggtg  
1620  
caccggccac tctgttgaat gaagcaggta aagatgctt aaaatcctct caaaccatta  
1680  
agtctagaga agagggaaag gcaacccagc agagggaggt agaaagcttc cattctgaga  
1740  
ctgaccagga tacgccctgg ctgctgcccc aggagaaaac ccccttggc tccgctaaac  
1800  
ccttggatta tgtggagatt cacaaggta acaaagatgg tgcattatca ttgctaccaa  
1860  
aacagagaga gaacagcggc aagcccaaga agcccgggac tcctgagaac aataaggagt

32608-A-sequence list with table 3.ST25.txt

1920

atgccaaggt gtccggggtc atggataaca acatcctggt gttggtgcca gatccacatg

1980

ctaaaaacgt ggcttgcttt gaagaatcag ccaaagaggc cccaccatca cttgaacaga

2040

atcaagctga gaaagccctg gccaaacttca ctgcaacatc aagcaagtgc aggctccagc

2100

tgggtggttt ggattacctg gatcccgcat gttttacaca ctccttcac tgatagcttg

2160

actaatggaa tgattggta aaatgtgatt tttcttcagg taacactaca gagtacgtga

2220

aatgctcaag aatgttagtca gactgacact actaaagctc ccagctcctt tcattgctcca

2280

tttttaacca cttgcctctt tctccagcag ctgattccag aacaaatcat tatgtttcct

2340

aactgtgatt tgttagattt cttttgctg ttagttataa aactatgtgt tcaatgaaat

2400

aaaagcacac tgcttagtat tcttgaggga caatgccaat agtataatcc tctggaaaag

2460

gctttcatga tttggcatgg gacagacgga aatgaaattt tcaaaattgt ttaccataga

2520

aagatgacaa aagaaaattt tccacatagg aaaatgccat gaaaattgct tttgaaaaac

2580

aactgcataa ctttacact cctcgccat tttatttagga ttacccaaat ataaccattt

2640

aaagaaaagaa tgcattccag aacaaattgt ttacataagt tcctataacct tactgacaca

2700

ttgctgatat gcaagtaaga aat

2723